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Benchmarking the Colombian Foresight Programme against practices in Europe and South America ¹

BENCHMARKING DEL PROGRAMA COLOMBIANO DE PROSPECTIVA ANTE PRÁCTICAS EN EUROPA Y SUR AMÉRICA

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RESUMEN

Considerando la creciente importancia de comparar los estilos de prospectiva a nivel mundial, este artículo ubica las prácticas del Programa Colombiano de Tecnología Prospectiva (CTFP, por sus siglas en inglés) en una perspectiva internacional. Hemos comparado el Programa ante actividades prospectivas en Europa y Suramérica. Se requirió la combinación de información de dos bases de datos prospectivas (construidas por las redes de EFMN y SELF-RULE) las cuales están basadas en una muestra de 675 ejercicios prospectivos. Un total de 32 estudios realizados o apoyados por CTFP fueron comparados contra prácticas de cuatro regiones donde CTFP ha construido vínculos: Noroeste de Europa, Sur de Europa, Este de Europa y Sur América. Norte América no fue incluida dado que solo unos pocos eventos involucraron a practicantes de Estados Unidos y estos fueron vinculados principalmente a la capacidad de construir actividades sobre herramientas y técnicas de análisis de entornos. Por supuesto, la simple comparación, que enfrenta cada característica del Programa ante características similares en otros países, no es suficiente para definir conclusiones acerca de la complejidad de las actividades que han sido aplicadas a los objetivos específicos del Programa. Sin embargo, el benchmarking ha probado

ABSTRACT

Considering the growing importance of comparing foresight styles, this paper puts the Colombian Technology Foresight Programme (CTFP) practices into an international perspective. Here we benchmark the Programme against foresight activities in Europe and South America. This required the combination of information from two foresight databases (built by the EFMN and SELF-RULE networks) which is based on a sample of 675 foresight exercises. A total of 32 studies conducted or supported by CTFP were benchmarked against practices in four regions where CTFP built project linkages: Northwest Europe, Southern Europe, Eastern Europe and South America. North America was not included given that only a few events involved US practitioners and these were mainly linked to the capacity building activities on horizon scanning tools and techniques. Of course, simplistic benchmarking, that matches each feature of the Programme against similar features in other countries, is not enough to draw conclusions about the complexity of activities that have been pursued to the specific objectives of the Programme. However, benchmarking has proven to be a good instrument to stimulate the

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ser un buen instrumento para estimular el desempeño de los indicadores claves de prospectiva, aprender de las experiencias de otros y adquirir conocimiento acerca de las prácticas actuales.

Palabras clave: Prospectiva, referenciamiento estratégico, Programa de Prospectiva Tecnológica, capacidad de construir futuros.

performance of key foresight indicators and to learn from experiences of others and thereby acquiring practical knowledge about current practices.

Key Words: Foresight, benchmarking, best practices, Technology Foresight Programme, capacity building.

INTRODUCTION TO COLOMBIAN FORESIGHT

Futures work in Colombia began in the **late 1970s**, if not earlier. But it was not until the **late 1990s** when **some capabilities** were built in a few universities and regional research and technology development (RTD) centres. In the **early 2000s** the country already had **over 50 experiences** in a wide range of topics and sectors with different territorial scope, e.g. international, national and sub-national (see Medina and Ortegón, 1997). These experiences have been closely related to the developments of the Colombian Office of Science and Technology (Colciencias). Such interest dates from the early 1970s with projects like “*Colombia Operation*”, and has persisted in time with the promotion of several activities focused on the role of S&T for the development of the country. Also important have been the efforts Colciencias has made in order to: (1) understand global S&T and social challenges affecting the world and, at the same time, (2) build national competences capable of developing nationally-beneficial responses to global challenges. In the 1980s and the 1990s Colciencias promoted different types of future-oriented initiatives. Among these projects are: *Where is Colombia going?*, and the *Strategic Dialogues* (dealing with challenges proposed by the Global Dialogues of the 2000 Hannover World Fair).

At the end of 2002 Colciencias joined **UNIDO’s Technology Foresight initiative** and the Colombian Technology Foresight Programme (CTFP) was launched under the sponsorship of Colciencias and the Andean Development Corporation (CAF) in 2003. Overall, the Programme has been involved – either as main sponsor/organiser or contributor/supporter – in 32 studies. Today, CTFP is among the strongest experiences in the Latin region. There is a mix of **national** and **sub-national** studies on **sectors, themes** and **territories**, thus making the Programme widely known and respected in Latin

America. CTFP has also become a reference point in the Andean countries and experiences are comparable with that of more industrialised countries in the region, e.g. Argentina, Brazil, Chile, and Mexico (Popper and Medina, 2008).

THE COLOMBIAN TECHNOLOGY FORESIGHT PROGRAMME (CTFP)

CTFP began work in 2003. It is a national programme owned and managed by the government. The first cycle of the Programme (2003–04) had a broader portfolio of sponsors, including the Colciencias, the National Training Service (SENA), the Andean Development Corporation (CAF), UNIDO and the Ministry of Commerce, Industry and Tourism. This multi-source funding scheme practically forced the Programme to design its activities around sectoral and territorial foresight practices, with some exercises combining these two approaches on what was defined as sector-territorial projects. In total, the first cycle supported eight exercises while the second cycle covered 24 projects in the period 2005–08 (see Table 1, below).

THE GROWING IMPORTANCE OF COMPARING FORESIGHT ‘STYLES’

Since the mid-1990s, the amount of literature (including reports, book chapters and journal articles) devoted to the description and comparison of foresight practices have increased rapidly (e.g. see OECD, 1996; Cameron *et al.*, 1996; Gavigan and Cahill, 1997; Nedeva *et al.*, 2000; Grupp, 1999; Blind *et al.*, 1999; Molas-Gallart *et al.*, 2001; Georghiou *et al.*, 2008; Keenan and Popper, 2008; and Popper, 2008a,b). One significant objective of these benchmarking efforts has been to understand the fundamental nature of foresight experiences in different contexts with the intention of drawing lessons about regional and country-specific foresight styles.

Benchmarking is a method that is commonly used for marketing and business strategy planning and has recently become more popular in governmental and inter-governmental strategic decision-making processes. The main question here is what others are doing in comparison to what you are doing. The underlying principle for benchmarking foresight practices has been to learn what works well in what situation, with a view to improve foresight activities

and increase foresight know-how. Such a comparative analysis has already begun with the production of the EFMN annual mapping reports, which describe and compare the attributes of various populations of foresight activities. Through such analysis and comparison, various patterns have already been discerned that contribute to our knowledge and understanding of foresight practice (see Popper et al, 2007; Keenan et al, 2006).

Table 1
Projects supported by CTFP (2003–08)

First Cycle (2003 – 04)	
P1	Colombian Milk Sector
P2	Colombian Electricity Sector
P3	Colombian Food Packaging Sector
P4	Tourism Sector in Cartagena City
P5	Health Cluster of the Cauca Region
P6	Horticulture in the Bogota Plains
P7	Vegetable Fibres in Santander Region
P8	National Biotechnology Programme
Second Cycle (2005 – 08)	
P9	Colciencias: Productive Transformation of Colombia into a Knowledge Economy
P10	Colciencias / DNP: National STI Plan – Colombia Vision 2019
P11	Colciencias / MCIT : Micro-Small-and-Medium Enterprises Fund (Fomipyme)
P12	Colciencias / Centre of Excellence: Tuberculosis
P13	Colciencias / Centre of Excellence: New Materials (Hardening Surface)
P14	Colciencias / Centre of Excellence: Essential Oils and Natural Products (Medicinal Plants)
P15	Colciencias / Centre of Excellence: Genetic Resources and Biodiversity (Black Sigatoka in Plantain)
P16	Colciencias / Centre of Excellence: Culture, Development and Peace
P17	Colciencias / EAAB / EPM: Pilot on the Water Recycling
P18	Colciencias / CIDET : Pilot on the Electricity Cluster
P19	Colciencias Programmes: Biodiesel Production Technologies
P20	Colciencias P Programmes: Bioinputs (e.g. biofertilizers)
P21	Colciencias Programmes: Electronics Applied to Agriculture
P22	Colciencias Programmes: Nanotechnology Manufacturing Methods
P23	Colciencias Programmes: Malaria Vaccines
P24	Colciencias Programmes: Social Conflicts Resolution
P25	Colciencias: National Capacities in Higher Education, Research and Innovation
P26	Colciencias / MADR: Furniture and Wood Products
P27	Colciencias / MADR: Cacao and Chocolate
P28	Colciencias / MADR: Dairy Products
P29	Colciencias / MADR: Tilapia Fish
P30	Productive Transformation and Higher Education in CAB countries (SECAB)
P31	Scenarios for Research and Technology Development Cooperation with Europe (SCOPE)
P32	Strategic Euro-Latin Foresight Research and University Learning Exchange (SELF-RULE)

Source: Elaborated by the authors

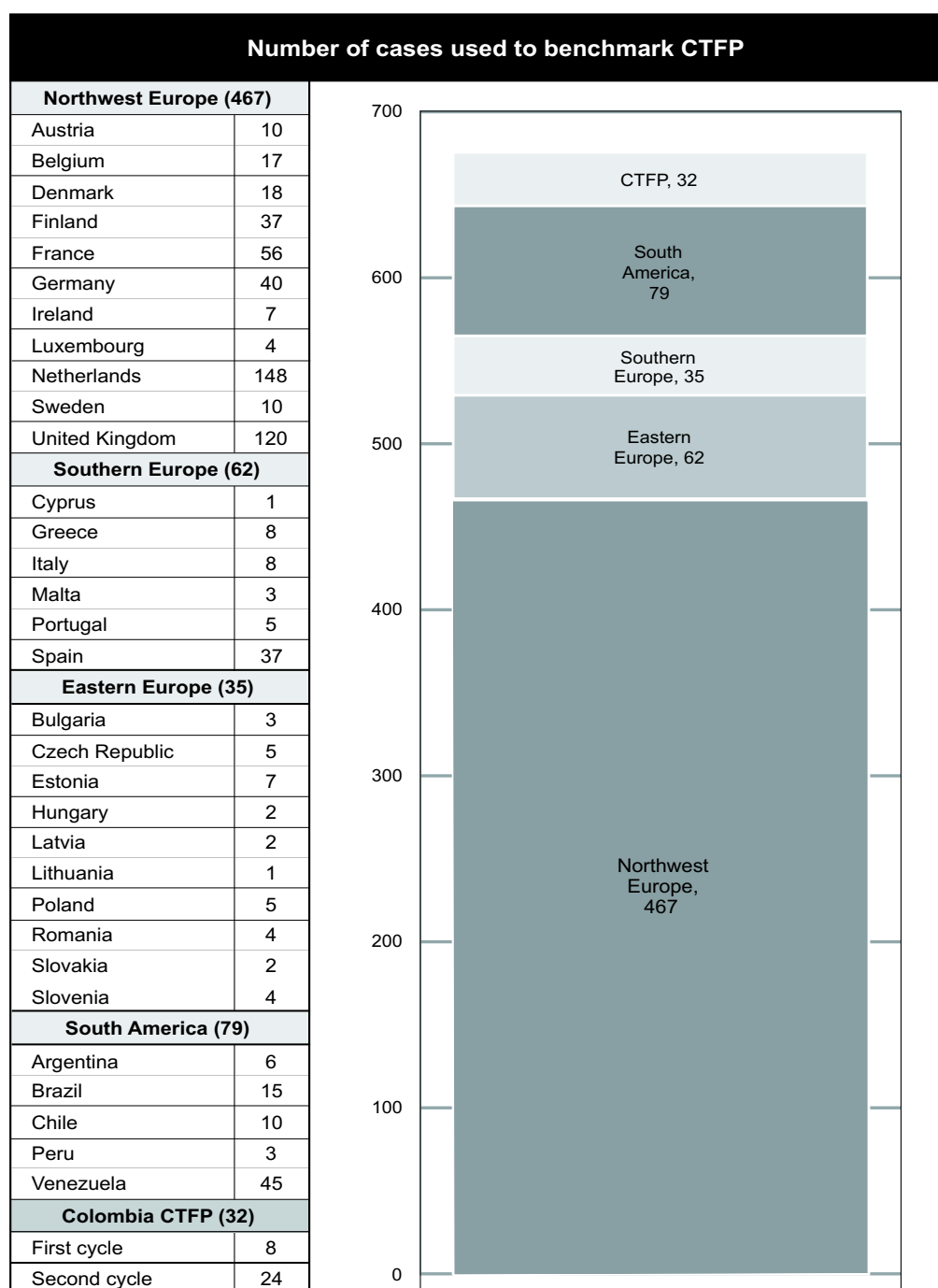
Considering the growing importance of comparing foresight styles, this section puts CTFP practices into an international perspective. Here we benchmark the Programme against foresight activities in Europe and South America. This required the combination of information from two foresight databases (built by the EFMN and SELF-RULE networks) which is based on a sample of 675 foresight exercises (see

Table 2, below). Additional face-to-face and telephone interviews to members of the Colombian TF Programme and project leaders were also needed in order to create a distinctive profile for CTFP. The interviews helped us to map the 32 projects of the Programme against ten indicators commonly used by European practitioners to benchmark foresight experiences in the world.

Given that CTFP projects had stronger linkages with European and South American practices, four regions were selected for the comparative analysis: Northwest Europe (467 cases), Southern Europe (62 cases), Eastern Europe (using 35

cases) and South America (79 cases). North America was not included given that only a few events involved US practitioners and these were mainly linked to the capacity building activities on horizon scanning tools and techniques.

Table 2
Number of cases of benchmarked regions Number of cases used to benchmark CTFP



Source: EFMN (2008)

BENCHMARKING INDICATORS

The benchmarking involved an assessment of similar units of analysis in terms of common indicators. In this section we have used the following ten indicators presented in Table 3.

INDICATOR 01: COOPERATION

One important feature of national and intentional foresight programmes is the growing emphasis on cooperation. Perhaps the most significant and explicit effort to underline the importance of

Table 3
Indicators used to benchmark CTFP foresight practices

Indicator	Benchmarking objective
<i>Cooperation</i>	To assess and compare CTFP cooperation strategy with other countries, especially in Europe and South America.
<i>Sponsorship</i>	To assess and compare the role of different stakeholders providing financial or political support to foresight activities
<i>Target audiences</i>	To assess and compare the typology of stakeholders CTFP and other regions have targeted as potential users of results.
<i>Scale of Participation</i>	To assess and compare the openness of the processes supported by CTFP and other regions.
<i>Project duration</i>	To assess and compare the amount of time required to complete foresight studies.
<i>Project funding</i>	To assess and compare the level of funding that CTFP projects and those in other regions managed to receive from its sponsors.
<i>Territorial scale</i>	To assess and compare how foresight projects cover sub-national, national and supra-national issues.
<i>Time horizon</i>	To assess and compare how far into the future have CTFP and other regions focused upon.
<i>Methods</i>	To assess and compare the number and type of methods commonly used by CTFP and foresight activities in other regions.
<i>Outputs</i>	To assess and compare the number and type of codified outputs of foresight projects.

Source: Elaborated by the authors

cooperation in foresight has been the 'foresight in an enlarged European research and innovation area' conference organised in Ioannina, Greece (2003). As a result, a manifesto was produced to highlight priority objectives for the foresight community, which include:

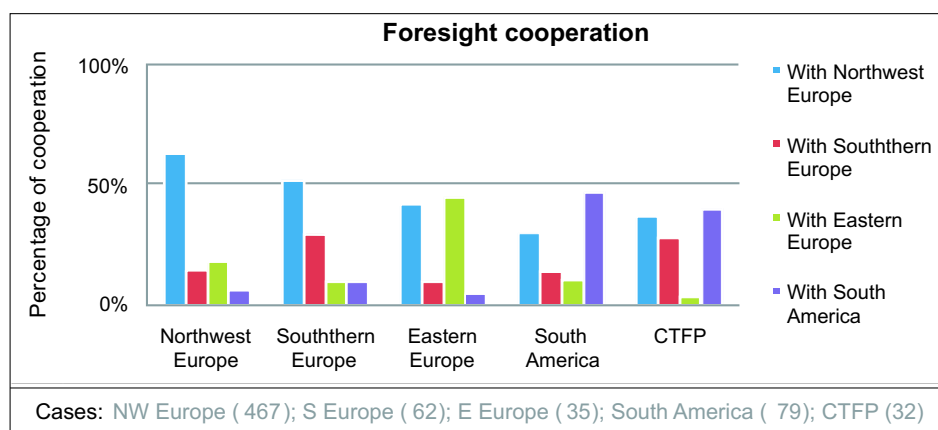
- to strengthen links between practitioners and policy makers in order to better understand future developments;
- to promote cooperation in foresight and transfer know how; and
- to 'establish structures to exploit best practices and facilitate communication among key actors', among others.

With these in mind, we have combined online survey results with interview findings in order to understand CTFP cooperation strategy. Figure 1 (below) shows that CTFP has promoted strong cooperation with three regions: South America (mainly Brazil, followed by Chile, Argentina, Cuba,

Panama, Peru and Venezuela); Northwest Europe (mostly with the UK, followed by Finland and Germany in two projects); and Southern Europe (principally with Spain). From the interviews it is possible to conclude that CTFP cooperation with South America has focused on strengthening the links between practitioners and policy makers. While cooperation with European practitioners has favoured knowledge transfer and the establishment of procedures to exploit best practices and facilitate communication among key stakeholders. Overall, CTFP cooperation strategy is similar to that of other countries in South America, however it is possible to notice that cooperation with Europe is much higher in CTFP.

It may be worth expanding cooperation with Eastern European countries (especially with Russia) as well as Asia (in particular China and Japan) and North America (Mexico, USA and Canada).

Figure 1
Benchmarking CTFP cooperation



Note: The units of analysis in EFMN being roughly the same as the projects of the CTFP

Source: EFMN (2008) Elaborated by the authors

INDICATOR 02: SPONSORSHIP

Figure 2 benchmarks CTFP sponsorship against other four regions. The results show similar patterns with nearly all CTFP projects being financially supported by governmental bodies (i.e. Colciencias, SENA, Ministry of Agriculture and the Ministry of Commerce). Two exceptions are the SCOPE and SELF-RULE projects. The former was fully funded by the European Commission (EC) and the latter was 75% EC-funded and the

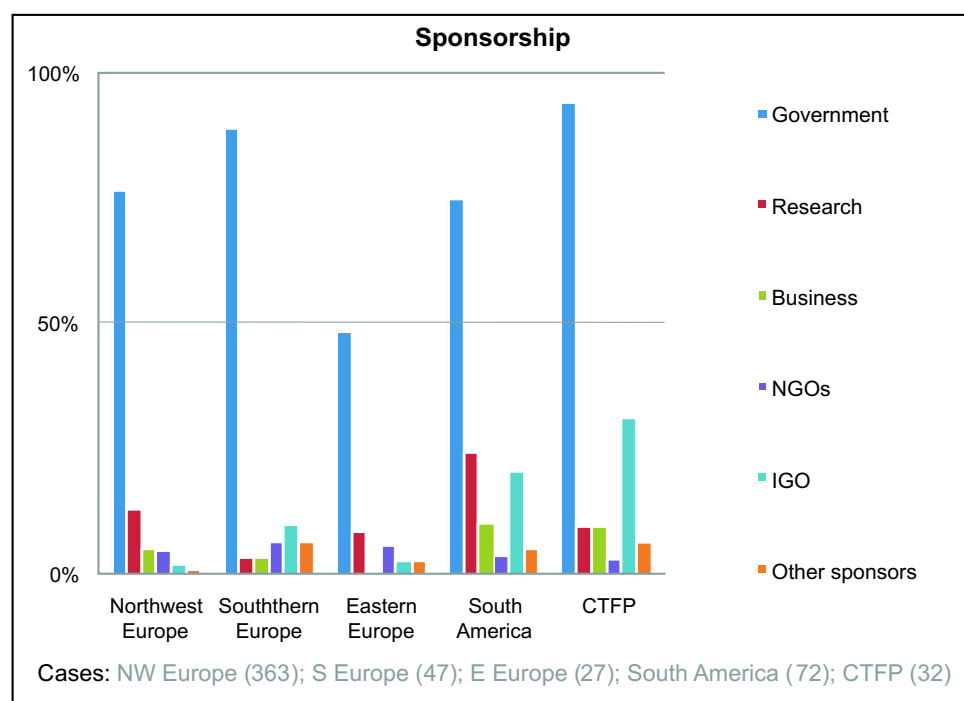
remaining 25% coming from twelve academic institutions (one of which was UNIVALLE University in Cali, Colombia). Government sponsorship is common in foresight practices all over the world.

An interesting feature of CTFP foresight is the number of projects (10 of 32) that have been directly or indirectly sponsored by international organisations (IGO). In addition to the above mentioned EC-funded initiatives, CTFP lead one

project on higher education for the Andres Bello Agreement (CAB) and another four agricultural projects for the Ministry of Agriculture that have been partly funded by the World Bank. The figures also include the first three projects of the Programme sponsored by the Andean Development Bank (CAF) during the first cycle

(2003–04). IGOs have also played an important in South American foresight more generally; however it is worth mentioning that figures for South America relate to exercises supported by organisations like UNIDO and ECLAC, which did not fund CTFP projects.

Figure 2
Benchmarking CTFP sponsorship



Note: >100% possible

Source: EFMN (2008) Elaborated by the authors

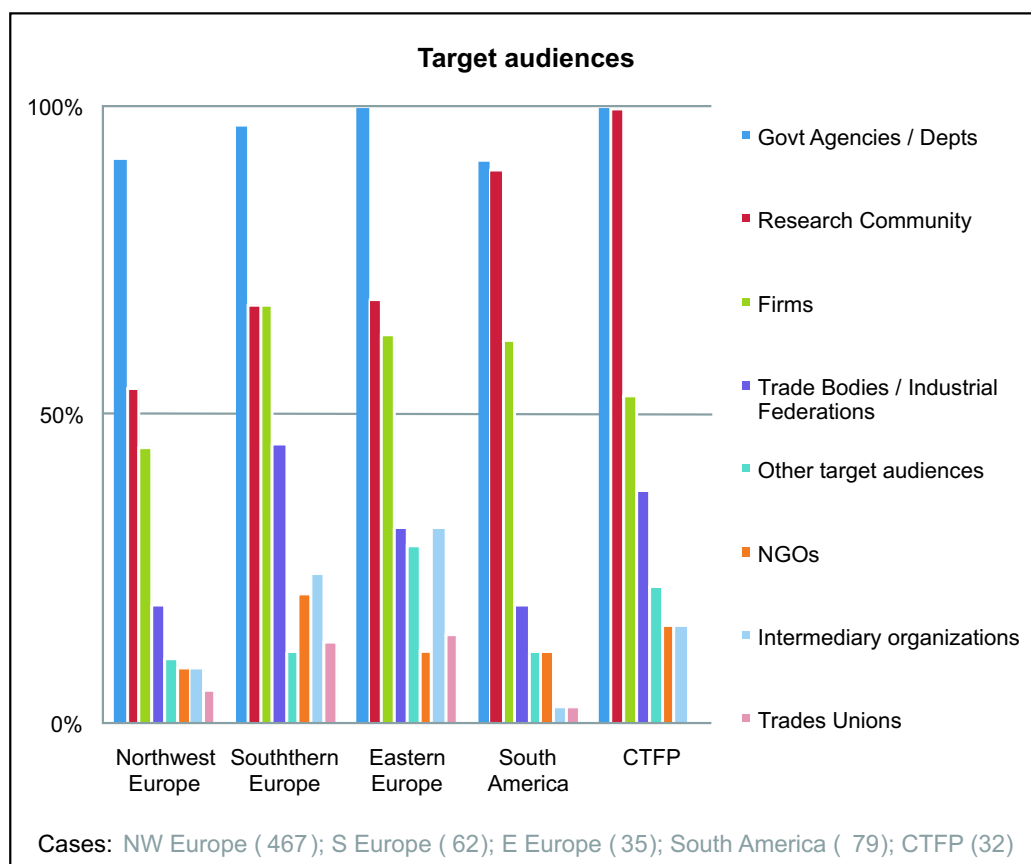
INDICATOR 03: TARGET AUDIENCES

Figure 3 benchmarks CTFP target audiences against other four regions. The results show that every single project targeted governmental bodies and the research community. The third largest group of users is the private sector, targeted by 17 projects (all first cycle projects plus nine from the second cycle). These three are the top target audiences of foresight activities in other regions. But having the previous analysis of sponsorship in mind, one can observe that government agencies and departments are among target groups more often than they are among sponsoring groups, suggesting that initiatives sponsored by other groups (e.g. IGO, firms and

the research community) may use foresight as a tool to shape public policy agendas.

Similar to foresight practices in Southern Europe and Eastern Europe, CTFP has also paid considerable attention to industrial federations, other audiences (e.g. regional bodies like Cundinamarca Planning Secretary and Cartagena Chamber of Commerce, for example), NGOs, and intermediary organisations. This makes trade unions the only group that have not been targeted by CTFP projects (and these are not very widely targeted in Foresight more generally).

Figure 3
Benchmarking CTFP target audiences



Note: >100% possible

Source: EFMN (2008) Elaborated by the authors

INDICATOR 04: SCALE OF PARTICIPATION

Figure 4 compares the Scale of Participation of CTFP projects with that of other regions. The results show that between 50% of CTFP exercises involved more than 50 participants. These figures are similar to those of Northwest Europe and Southern Europe. Overall, South American exercises show higher levels of participation (probably a consequence of multi-method and long-duration projects, see Figure 3.5, below), followed by Eastern Europe where the large number cases with 201-500 participants (possibly a direct reflection of the number of supra-national studies mapped in this region, see Figure 3.7, below).

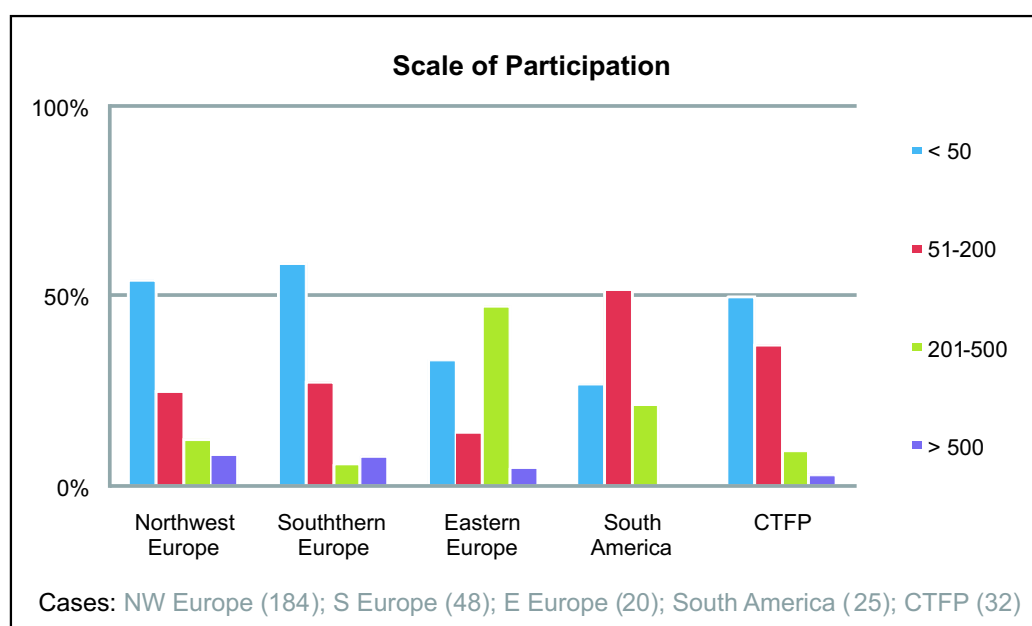
A key message here is that participation across regions is relatively low, with three regions

showing fewer than 50 people in half of their exercises. In Northern Europe and Southern Europe one factor influencing these figures is that some of the largest national programmes have been broken down into several projects (e.g. fully-fledge technology foresight programmes have been mapped by their constituent panels), thus creating a measurement effect. In CTFP, there are different reasons for low participation in 50% of the projects. Seven horizon scanning projects were mainly launched to build horizon scanning skills (i.e. bibliometrics, patent analysis and trend analysis) and assist Colciencias S&T Programmes. Five other projects on Centres of Excellences (CEs) were looking at the future of the CEs from within. Two demonstrative studies involving public enterprises have also focused on structural foresight. And two international projects SCOPE and SELF-RULE were not design

to involve more than 50 Colombian nationals. Of course, a further explanation may simply be that *large-scale, multi-participant exercises are too challenging, expensive and time-consuming to*

organise, so that in many situations, the ideal of deep and wide participation remains just that – an ideal (Keenan and Popper, 2008).

Figure 4
Benchmarking CTFP Scale of Participation



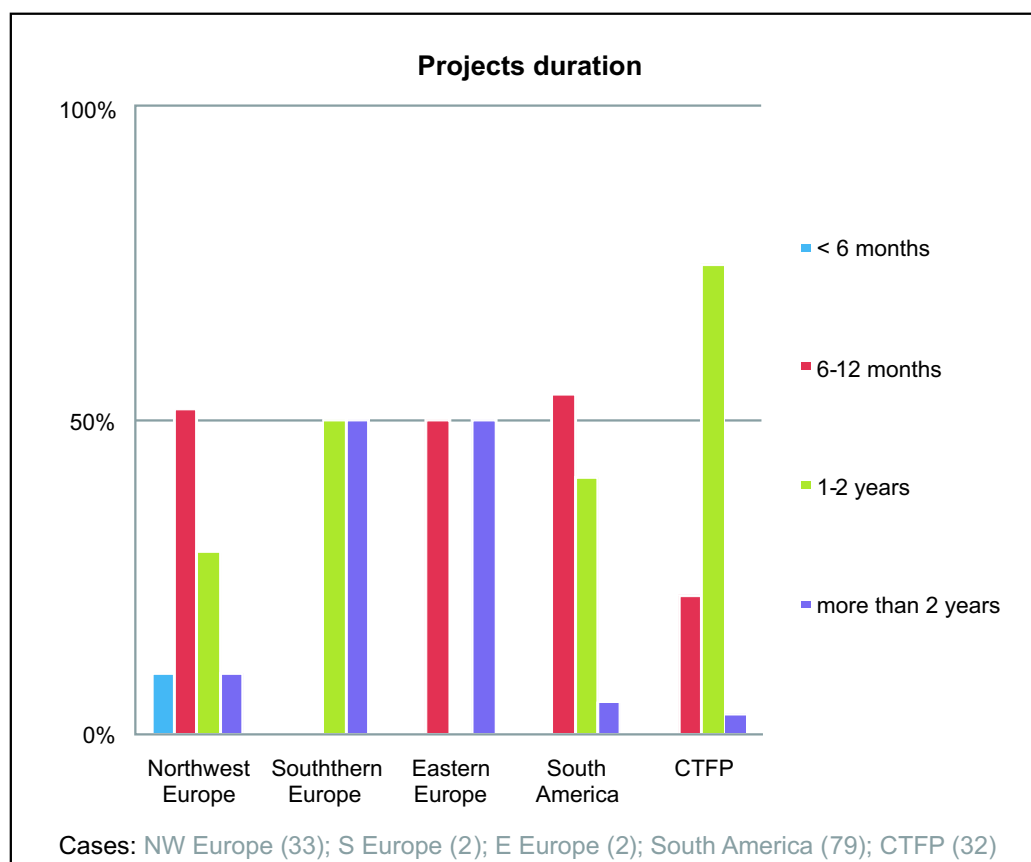
Source: EFMN (2008) Elaborated by the authors

INDICATOR 05: PROJECT DURATION

Foresight projects tend to require a minimum amount of time to implement, while overly prolonging exercises run the risk of a loss of interest among sponsors, target audiences and participants. As there would seem to be few reasons, if any, why the duration of foresight activities should vary between world regions, our proposition is that this variable is independent and that similar patterns of foresight duration should be observable across the world. However, the main problem in testing this proposition is a lack of data for Southern Europe and Eastern Europe, owing to the difficulty in estimating end-dates of foresight exercises, particularly as activities tend to continue long after 'official' end-

dates. More over, the latter are often unclear as well. For this reason, relatively few exercises have been mapped against this indicator, with the exception of South America (79 cases, see Figure 5). The data for this region suggests that most foresight projects have a duration of six months to two years. This would also seem to be the case for Northwest Europe where there is sufficient data to make any sort of reliable assessment. CTFP results show that 24 of 32 projects had a duration of one to two years, but this is also because some implementing institutions applied for up to six months extension of the 'original' plan of twelve months.

Figure 5
Benchmarking CTFP Project duration



Note: EFMN captures too many very short projects that are probably not real foresight

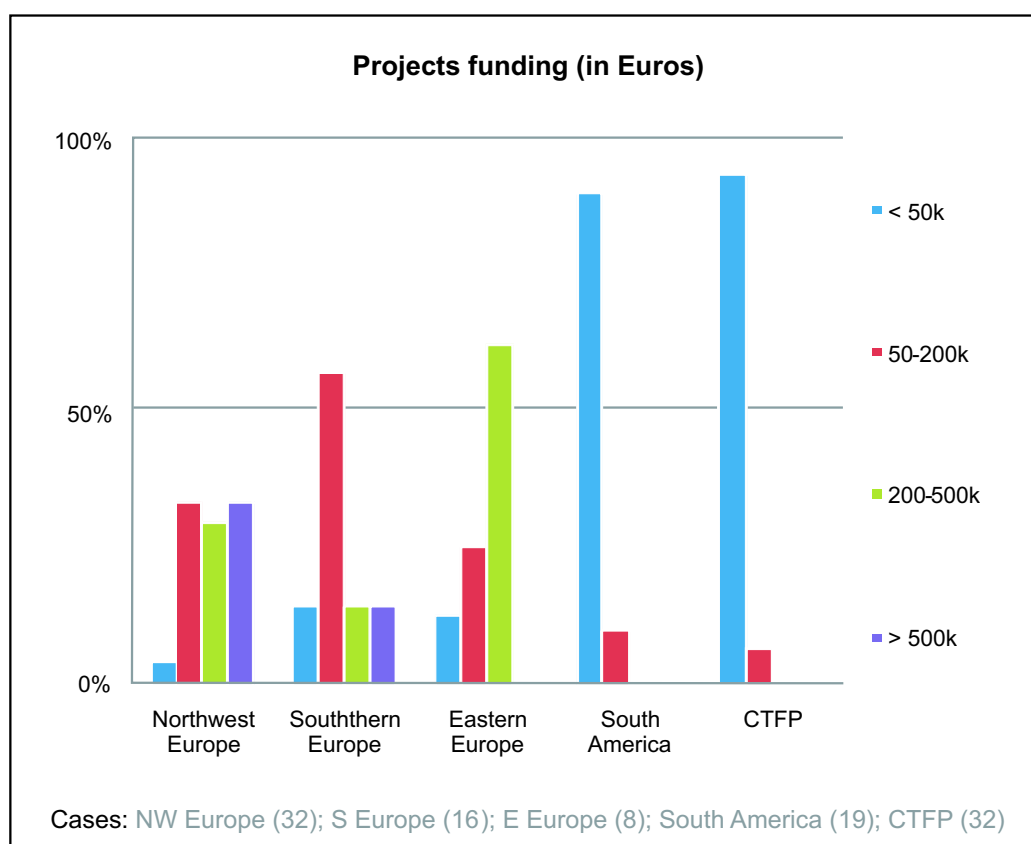
Source: EFMN (2008) Elaborated by the authors

INDICATOR 06: PROJECT FUNDING

The amount of funding made available to conduct a foresight exercise depends upon a number of factors concerning scope and scale. However, all other things being equal, we might expect funding levels to be a function of regional economic development, with exercises costing more in Europe than in South America. Testing this proposition is, however, frustrated by the lack of success in collecting data on the cost of foresight activities. Figure 6 (bellow) shows that the vast majority of foresight exercises in that region cost •50,000 or less. Indeed, no activities in South America cost more than •200,000. Although the numbers for Northwest Europe represent fewer than ten percent of the 479 sample, they are still interesting. The figures for this region paint a

rather different picture than that seen in South America and CTFP, with a little over half of the exercises costing more than •200,000. In CTFP only 2 studies had a budget above •50,000. Southern Europe has a similar distribution, though slightly skewed to the lower end of the spectrum when compared to Northwest Europe. Although this data is weak in terms of volume, it does seem to point to what one would expect with regards to funding levels in different regions, i.e. that the differences in foresight cost between regions are readily explained by the local cost of labour, goods and services, as well as the financial muscle of local sponsors (mostly public administrations).

Figure 6
Benchmarking CTFP Project funding



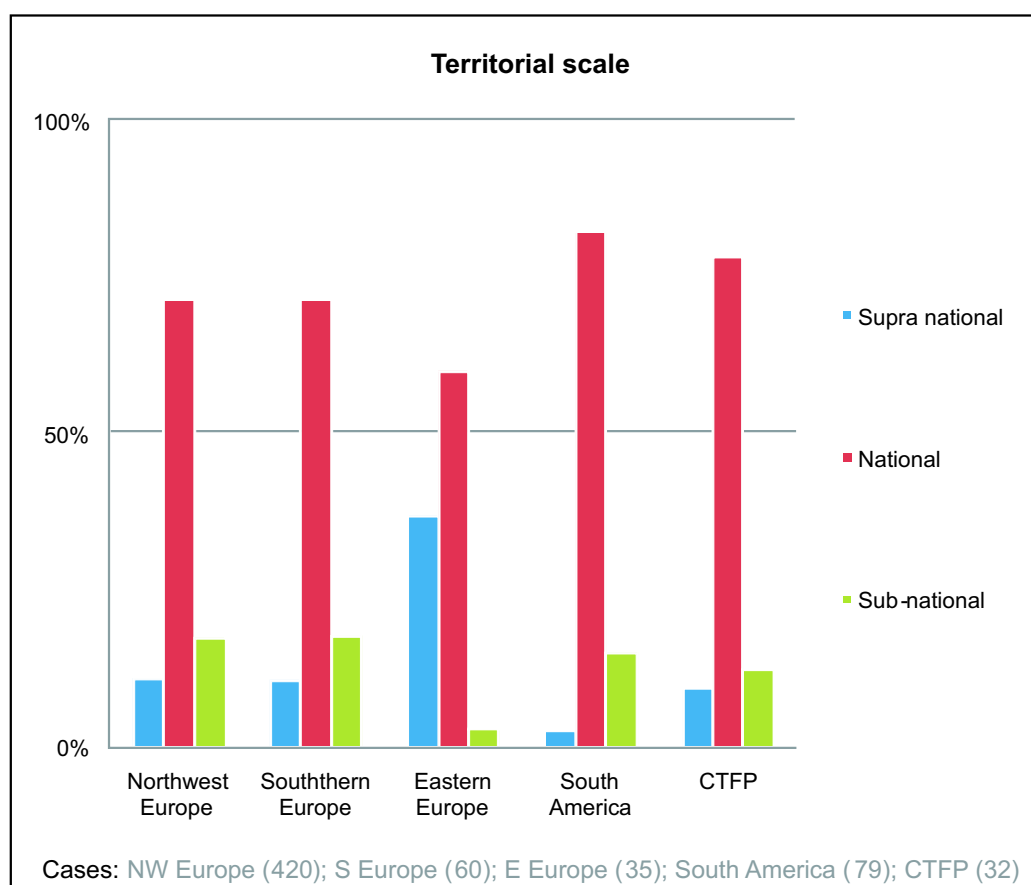
Source: EFMN (2008) Elaborated by the authors

INDICATOR 07: TERRITORIAL SCALE

Foresight activities are normally carried out at a variety of territorial scales, ranging from sub-national projects (covering cities or regions like Cali or Valle del Cauca) to national exercises (covering sectors or themes in a country) to supra-national studies (also focused on sectors or themes but on a much larger geographical scale, such as Europe or Latin America, for example). Figure 7 shows that most European and South American foresight work is carried out at the national level. This result is coherent with the fact that most policy-making is still carried out at this level. Sub-national exercises are most common

in Northwest, Southern Europe, South America and CTFP. Figures for Eastern Europe indicate that sub-national studies are not very common, mainly because sub-national regional governance is not very well developed in the majority of countries in this region. Instead, Eastern Europe shows the largest proportion of supra-national activities, partly a consequence of the European Union enlargement process. An interesting result here is that, despite not being a common practice in South America, CTFP has been lead or participated in three supra-national studies.

Figure 7
Benchmarking CTFP territorial scale



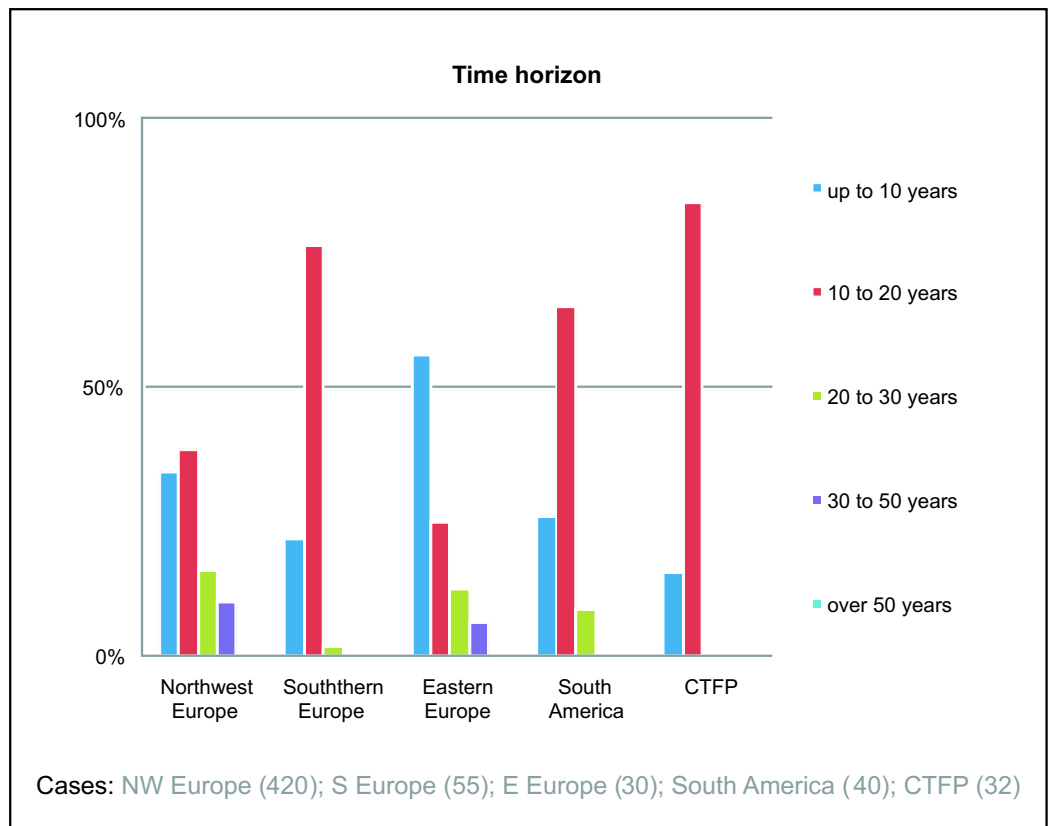
Source: EFMN (2008) Elaborated by the authors

INDICATOR 08: TIME HORIZON

Figure 8 shows that the majority of foresight projects in nearly all regions have a time horizon between 10 to 20 years; the exception here is Eastern Europe. CTFP results show some similarity with Southern European countries like Spain where looking into the far future (i.e. over 20 years) is not very common. On the contrary, figures for Northwest Europe indicate that over 10% of foresight activities in these countries are looking beyond 2030. Of course, time horizons are more likely to be shorter in emerging economies marked sometimes by radical changes

than in those where there is more stability and greater certainty around short-term prospects. In South America, only a few national studies in Argentina, Brazil and Venezuela have looked beyond 2020. With this in mind, countries in the region would probably have to find better ways of persuading organisations like the Andean Community of Nations (CAN), ECLAC and MERCOSUR to emulate European Union initiatives promoting longer-term objectives such as regional economic integration, social cohesion and RTD cooperation among its member states.

Figure 8
Benchmarking CTFP time horizon



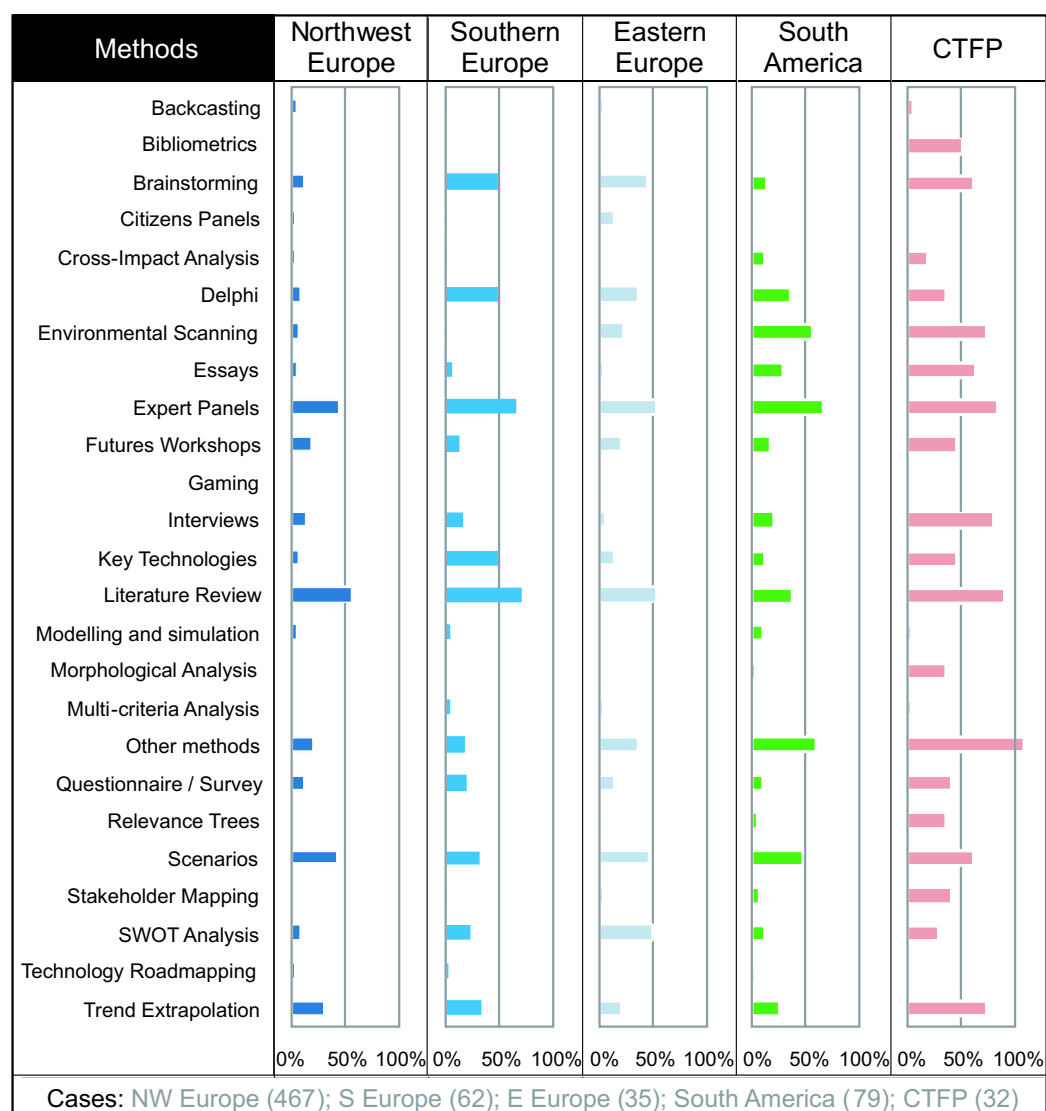
Source: EFMN (2008) Elaborated by the authors

INDICATOR 09: METHODS

Figure 9 benchmarks CTFP methods against those used in other regions. (The instrument here relies on the EFMN classification of methods: while problematic, this provides the only large-scale point of reference) The methods choice is perhaps the most distinctive feature of CTFP. As one can observe, the number and size of bars for CTFP figures are larger than those of other regions. The main reason for this is that an average CTFP study

involved more than ten methods, with more or less half of these being horizon scanning techniques (including bibliometrics, trend extrapolation and patent analysis) and the other half related to foresight and productive chain approaches (e.g. scenarios, brainstorming, stakeholders mapping, key technologies, morphological analysis, relevance trees, among others).

Figure 9
Benchmarking CTFP methods



Source: EFMN (2008) Elaborated by the authors

INDICATOR 10: OUTPUTS

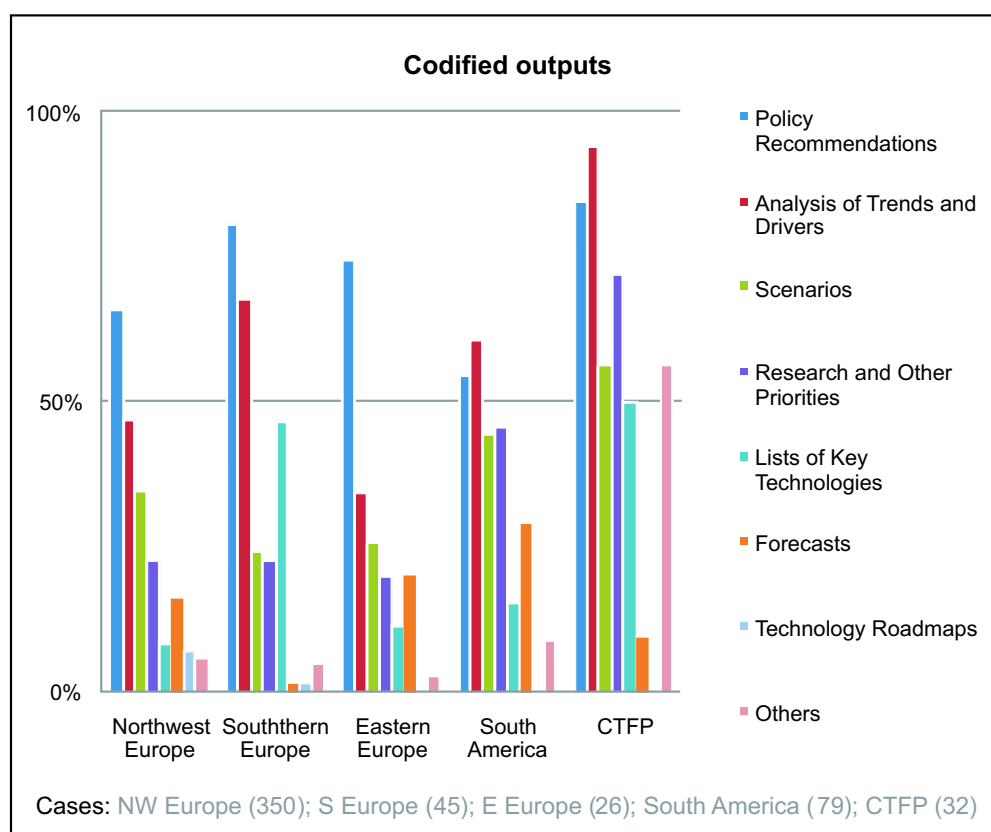
Figure 10 benchmarks CTFP codified outputs with those in other regions. The results indicate that policy recommendations are the most common outputs in all regions. However, lower figures for South America reveals that a considerable number of studies usually get to the development of scenarios and shared visions of the future but they do not provide policy-makers with a handful list of clear policy recommendations. In general,

“local practitioners” should take part of the blame, given that in some studies, sponsors have found few options for them to decide upon (e.g. the analysis of major trends and drivers alone do not always provide the explicit advice that decision-makers require to maintain, change or introduce policies). Some interviews revealed that this was the case of some projects of the first cycle of CTFP, but this weakness seems to have been corrected. In fact, during the second cycle of CTFP a much stronger emphasis was made on the

identification of research priorities and lists of key technologies for the Centres of Excellences, Colciencias S&T Programmes and various stakeholders involved in the productive chain studies lead by the Ministry of Agriculture, for

example. Finally, the size of the bar for other outputs reflects the deliberate publication strategy of CTFP, which produced several books, manuals, book chapters and journals articles, both nationally and internationally.

Figure 10
Benchmarking CTFP codified outputs



Source: EFMN (2008) Elaborated by the authors

FINAL REMARKS

The Foresight wave is growing. In other words, interest in using Foresight Exercises to inform policymaking in Science, Technology, and Innovation (STI) is continuing to extend around the world. It now seems safe to say that this is no mere fashion. The Foresight approach combines three elements: prospective (long-term) studies, planning (and priority-setting) inputs, and participative processes (engaging stakeholders and knowledge sources). This combination of elements is well-matched to the challenges confronting STI policy in the contemporary context. Increased emphasis on innovation as a tool for competitiveness and sustainability is experienced alongside pressure

on government and University budgets, uncertainty about environmental risks and ethical dimensions of new technologies, and a proliferation of opportunities for strategic R&D.

Foresight is liable to be needed more, rather than less, in years to come.

If we need Foresight, we need to learn about Foresight. This means learning more than just the formal results of Foresight exercises, in terms of what forecast and analyses of future opportunities and risks have been developed, or what plans have been proposed and priorities targeted. We also need to learn about how Foresight can best be designed and deployed.

Foresight activities are demanding of time and resources, and it is important to ensure that these are well used. Big challenges are being confronted, and the quality of Foresight will affect how prepared we are to address them. One lesson from the last decade or so of Foresight practice is that “one size does not fit all”. Different problems and contexts require different configurations of Foresight approaches: it is necessary to draw lessons not about “the” Foresight method, but about how Foresight approaches and techniques can be made appropriate to particular countries and circumstances. This means evaluation of Foresight efforts is not just a matter of examining the efficiency of the activities. Evaluation must also consider the effectiveness of the activities

in promoting change to meet the challenges that are confronted, and take into account the creativity that is exercised in designing Foresight that is fit for purpose.

Of course, simplistic benchmarking, that matches each feature of the Programme against similar features in other countries, is not enough to draw conclusions about the complexity of activities that have been pursued to the specific objectives of the Programme. However, benchmarking has proven to be a good instrument to stimulate the performance of key foresight indicators and to learn from experiences of others and thereby acquiring practical knowledge about current practices.

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